

On pages 12-13, please replace the paragraph from page 12 line 26 through page 13 line 16, in its entirety, with the following:

Linear photodiode arrays can be made in the configurations similar to that shown in Fig. 3 with one row and n columns or with one column and n rows. The cross sectional views of two typical device structures are shown in Fig. 19. The substrates can be transparent or opaque. In a preferred configuration (Fig. 20A), the linear photodiode arrays (210) can be fabricated onto a transparent glass substrate (214) with patterned ITO (211) or other transparent electrode materials (such as conducting polymer electrodes, thin metal films, metal/conducting polymer bilayer electrodes, dielectric film/ITO or metal film/dielectric film bilayer electrodes). The process of ITO patterning is well known in the existing art, and has been used broadly in LCD technologies. The deposition of the organic layer (212) can be achieved by spin casting, drop casting, printing, electrochemical synthesis or vapor deposition. The back electrode, in the form of a narrow bar shape (213), can be vacuum deposited with a simple shadow mask or patterned by means of photolithography. In most applications (especially for larger pixel sizes), no patterning of the sensing material is necessary. This sensing array can be mounted onto a print circuit (PC) board with a driving circuit. Several existing connection techniques (such as card-edge connectors, zebra connectors, bonding tapes, wire bonding, soldering bumper etc.) can be used for interboard connection. The drive circuits can also be arranged (surrounding the sensor array) onto the same substrate. This is especially preferred in arrays with a high pixel density (e.g., > 80 pixels/inch). In these cases, the IC chips can be bonded to the glass substrate, and the electrical connections can be achieved via soldering, one-dimensional conducting epoxy or other existing connection technologies.